Seasonal Changes

K-4 The student will demonstrate an understanding of seasonal weather changes. (Earth Science)

K-4.3 Summarize ways that the seasons affect plants and animals.

Taxonomy level: 2.4-A Understand Factual Knowledge

Previous/Future knowledge: As with other indicators at this grade level, students will experience their first formal introduction to important science concepts. Students will further study this concept in 2nd grade (2-3) when they demonstrate an understanding of daily and seasonal weather conditions and again in 3rd grade (3-2.4) when they explain how changes in the habitats of plants and animals affect their survival.

It is essential for students to know that the seasons affect plants and animals.

Examples of ways plants are affected are:

- Some plants shed their leaves and have bare branches in the winter season.
- Some leaves change color and fall off during the autumn/fall season.
- Some plants form leaf and flower buds and flowers in the spring season.
- Some plants, like trees, have full grown green leaves during the summer.

Examples of ways that animals are affected are:

- Some animals store food for the winter season.
- Some animals grow warm winter coats and shed that fur when it gets warmer.
- Some birds fly to a warmer place before the winter season and return in the spring.
- Some animals, like bears, go to sleep for a long time during winter.

It is essential for students to know that some trees will stay green all year and that some lose their leaves each autumn (fall) and grow them back in the spring.

It is not essential for students to know the terms deciduous and evergreen. Evergreens do shed (for example, pine trees are evergreens that shed needles but constantly grow new ones that stay green all year long). It is the deciduous trees that lose their leaves each autumn (fall) and grow them back in the spring.

Assessment Guidelines:

The objective of this indicator is to *summarize* ways that the seasons affect plants and animals; therefore, the primary focus of assessment should be to give major points or common themes that occur each season. However, appropriate assessments should also require students to *match* pictures or diagrams of various plants and animals with characteristics unique to specific seasons.